

09928799\_EAST

PLUS  
Search  
09/928799

(5767746  
4253180  
5982208  
6112068  
4363131  
4400726  
5002387  
5282223  
5313496  
5726607  
5754437  
5757652  
5574986  
4286219  
4389622  
4599732  
4949051  
5222106  
5727027  
5764648  
6188900  
6192220  
4052558  
4168398  
4246654  
4255810  
4260983  
4282493  
4298986  
4361886  
4363002  
4377871  
4419760  
4503562  
4531102  
4543540  
4562410  
4596026  
4627099  
4630283  
4764730  
4802235  
4817197  
4847876  
4853841  
4864589  
4908627  
4918406

4955075  
5012494) .pn.

09928799\_EAST

99

PLUS Search Results for S/N 09928799, Searched June 23, 2004

The Patent Linguistics Utility System (PLUS) is a USPTO automated search system for U.S. Patents from 1971 to the present. PLUS is a query-by-example search system which produces a list of patents that are most closely related linguistically to the application searched. This search was prepared by the staff of the Scientific and Technical Information Center, SIRA.

5767746  
4253180  
5982208  
6112068  
4363131  
4400726  
5002387  
5282223  
5313496  
5726607  
5754437  
5757652  
5574986  
4286219  
4389622  
4599732  
4949051  
5222106  
5727027  
5764648  
6188900  
6192220  
4052558  
4168398  
4246654  
4255810  
4260983  
4282493  
4298986  
4361886  
4363002  
4377871  
4419760  
4503562  
4531102

09928799\_LIST

4543540  
4562410  
4596026  
4627099  
4630283  
4764730  
4802235  
4817197  
4847876  
4853841  
4864589  
4908627  
4918406  
4955075  
5012494

09928799\_CLS  
Most Frequently Occurring Classifications of Patents Returned  
From A Search of 09928799 on June 23, 2004

Original Classifications

5 455/76  
4 331/1A  
2 331/2  
2 375/376

Cross-Reference Classifications

8 375/376  
5 331/17  
5 331/25  
5 331/DIG 2  
5 455/260  
3 327/156  
2 327/100  
2 327/159  
2 327/165  
2 329/310  
2 331/10  
2 331/11  
2 331/14  
2 331/1A  
2 331/34  
2 342/42  
2 370/516  
2 375/326  
2 375/327  
2 375/344  
2 375/371  
2 375/373  
2 380/34  
2 455/183.1

Combined Classifications

10 375/376  
6 331/17  
6 331/1A  
6 455/260  
5 331/25  
5 331/DIG 2  
5 455/76  
3 327/156  
3 331/11  
3 331/2  
3 370/516

09928799\_CLS

2 327/100  
2 327/159  
2 327/165  
2 329/310  
2 331/10  
2 331/117R  
2 331/14  
2 331/34  
2 342/42  
2 370/324  
2 375/326  
2 375/327  
2 375/329  
2 375/330  
2 375/333  
2 375/344  
2 375/346  
2 375/371  
2 375/373  
2 380/34  
2 455/183.1  
2 702/69  
2 702/75

09928799\_CLSTITLES

Titles of Most Frequently Occurring Classifications of Patents Returned

From A Search of 09928799 on June 23, 2004

|    |             |   |
|----|-------------|---|
| 10 | 375/376     | (2 OR, 8 XR)  |
|    | Class 375 : | PULSE OR DIGITAL COMMUNICATIONS                                   |
|    | 375/354     | SYNCHRONIZERS   |
|    | 375/371     | .Phase displacement, slip or jitter correction                    |
|    | 375/373     | ..Phase locking   |
|    | 375/376     | ...Phase locked loop  |
| 6  | 331/17      | (1 OR, 5 XR)  |
|    | Class 331 : | OSCILLATORS   |
|    | 331/1R      | AUTOMATIC FREQUENCY STABILIZATION USING A PHAS                    |
| E  |             | OR FREQUENCY SENSING MEANS  |
|    | 331/17      | .Particular error voltage control (e.g.,<br>intergrating network) |
| 6  | 331/1A      | (4 OR, 2 XR)  |
|    | Class 331 : | OSCILLATORS   |
|    | 331/1R      | AUTOMATIC FREQUENCY STABILIZATION USING A PHAS                    |
| E  |             | OR FREQUENCY SENSING MEANS  |
|    | 331/1A      | .AFC with logic elements  |
| 6  | 455/260     | (1 OR, 5 XR)  |
|    | Class 455 : | TELECOMMUNICATIONS  |
|    | 455/130     | RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY<br>CONVERTER        |
|    | 455/230     | .Local control of receiver operation                              |
|    | 455/255     | ..Local oscillator frequency control                              |
|    | 455/257     | ...Automatic  |
|    | 455/258     | ....Utilizing particular local oscillator<br>control              |
|    | 455/259     | .....Reference oscillator or source                               |
|    | 455/260     | .....Phase lock loop or frequency synthesizer                     |
| 5  | 331/25      | (0 OR, 5 XR)  |
|    | Class 331 : | OSCILLATORS   |
|    | 331/1R      | AUTOMATIC FREQUENCY STABILIZATION USING A PHAS                    |
| E  |             | OR FREQUENCY SENSING MEANS  |
|    | 331/18      | .With reference oscillator or source                              |
|    | 331/25      | ..Signal or phase comparator                                      |

09928799\_CLSTITLES

5 331/DIG 2 (0 OR, 5 XR)  
     Class 331 : OSCILLATORS  
     331/DIG 2 Phase locked loop having lock indicating or  
                   detecting means

5 455/76 (5 OR, 0 XR)  
     Class 455 : TELECOMMUNICATIONS  
     455/73 TRANSMITTER AND RECEIVER AT SAME STATION (E.G.  
                   TRANSCEIVER)  
     455/75 .With frequency stabilization (e.g., automatic  
                   frequency control)  
     455/76 ..Synthesizer

3 327/156 (0 OR, 3 XR)  
     Class 327 : MISCELLANEOUS ACTIVE ELECTRICAL NONLINEAR  
                   DEVICES, CIRCUITS, AND SYSTEMS  
     327/100 SIGNAL CONVERTING, SHAPING, OR GENERATING  
     327/141 .Synchronizing  
     327/155 ..With feedback  
     327/156 ...Phase lock loop

3 331/11 (1 OR, 2 XR)  
     Class 331 : OSCILLATORS  
     331/1R AUTOMATIC FREQUENCY STABILIZATION USING A PHAS  
     OR FREQUENCY SENSING MEANS  
     331/10 .Plural A.F.S. for a single oscillator  
     331/11 ..Plural comparators or discriminators

3 331/2 (2 OR, 1 XR)  
     Class 331 : OSCILLATORS  
     331/1R AUTOMATIC FREQUENCY STABILIZATION USING A PHAS  
     OR FREQUENCY SENSING MEANS  
     331/2 .Plural oscillators controlled

3 370/516 (1 OR, 2 XR)  
     Class 370 : MULTIPLEX COMMUNICATIONS  
     370/473 ..Transmission of a single message having  
                   multiple packets  
     370/498 .Combining or distributing information via tim  
                   channels  
     370/503 ..Synchronizing  
     370/516 ...Adjusting for phase or jitter



09928799\_CLSTITLES

- 2 327/100 (0 OR, 2 XR)  
 Class 327 : MISCELLANEOUS ACTIVE ELECTRICAL NONLINEAR  
 DEVICES, CIRCUITS, AND SYSTEMS  
 327/100 SIGNAL CONVERTING, SHAPING, OR GENERATING
- 2 327/159 (0 OR, 2 XR)  
 Class 327 : MISCELLANEOUS ACTIVE ELECTRICAL NONLINEAR  
 DEVICES, CIRCUITS, AND SYSTEMS  
 327/100 SIGNAL CONVERTING, SHAPING, OR GENERATING  
 327/141 .Synchronizing  
 327/155 ..With feedback  
 327/156 ...Phase lock loop  
 327/159 ....With digital element
- 2 327/165 (0 OR, 2 XR)  
 Class 327 : MISCELLANEOUS ACTIVE ELECTRICAL NONLINEAR  
 DEVICES, CIRCUITS, AND SYSTEMS  
 327/100 SIGNAL CONVERTING, SHAPING, OR GENERATING  
 327/165 .Regenerating or restoring rectangular (e.g.,  
 clock, etc.) or pulse waveform
- 2 329/310 (0 OR, 2 XR)  
 Class 329 : DEMODULATORS  
 329/304 PHASE SHIFT KEYING OR QUADRATURE AMPLITUDE  
 DEMODULATOR  
 329/310 .Including logic element (e.g., logic gate or  
 flip-flop)
- 2 331/10 (0 OR, 2 XR)  
 Class 331 : OSCILLATORS  
 331/1R AUTOMATIC FREQUENCY STABILIZATION USING A PHAS  
 E  
 OR FREQUENCY SENSING MEANS  
 331/10 .Plural A.F.S. for a single oscillator
- 2 331/117R (1 OR, 1 XR)  
 Class 331 : OSCILLATORS  
 331/107R SOLID STATE ACTIVE ELEMENT OSCILLATOR  
 331/108R .Transistors  
 331/117R ..L-C type
- 2 331/14 (0 OR, 2 XR)  
 Class 331 : OSCILLATORS  
 331/1R AUTOMATIC FREQUENCY STABILIZATION USING A PHAS  
 E  
 OR FREQUENCY SENSING MEANS  
 331/14 .With intermittent comparison controls

09928799\_CLSTITLES

2 331/34 (0 OR, 2 XR)  
 Class 331 : OSCILLATORS  
 331/1R AUTOMATIC FREQUENCY STABILIZATION USING A PHAS

E

OR FREQUENCY SENSING MEANS  
 331/34 .Particular frequency control means

2 342/42 (0 OR, 2 XR)  
 Class 342 : COMMUNICATIONS: DIRECTIVE RADIO WAVE SYSTEMS  
 AND DEVICES  
 342/42 RADAR TRANSPONDER SYSTEM

2 370/324 (1 OR, 1 XR)  
 Class 370 : MULTIPLEX COMMUNICATIONS  
 370/310 COMMUNICATION OVER FREE SPACE  
 370/315 .Repeater  
 370/316 ..Airborne or space satellite repeater  
 370/319 ...Multiple access (e.g., FDMA)  
 370/321 ....Time division (TDMA)  
 370/324 .....Synchronization

2 375/326 (0 OR, 2 XR)  
 Class 375 : PULSE OR DIGITAL COMMUNICATIONS  
 375/316 RECEIVERS  
 375/322 .Angle modulation  
 375/324 ..Particular demodulator  
 375/326 ...Carrier recovery circuit or carrier trackin

g

2 375/327 (0 OR, 2 XR)  
 Class 375 : PULSE OR DIGITAL COMMUNICATIONS  
 375/316 RECEIVERS  
 375/322 .Angle modulation  
 375/324 ..Particular demodulator  
 375/327 ...Phase locked loop

2 375/329 (1 OR, 1 XR)  
 Class 375 : PULSE OR DIGITAL COMMUNICATIONS  
 375/316 RECEIVERS  
 375/322 .Angle modulation  
 375/329 ..Phase shift keying

2 375/330 (1 OR, 1 XR)  
 Class 375 : PULSE OR DIGITAL COMMUNICATIONS  
 375/316 RECEIVERS  
 375/322 .Angle modulation  
 375/329 ..Phase shift keying

## 09928799\_CLSTITLES

- 375/330                   ...Differential (diphase)
- 2   375/333           (1 OR, 1 XR)  
       Class    375 :   PULSE OR DIGITAL COMMUNICATIONS  
       375/316           RECEIVERS  
       375/322           ..Angle modulation  
       375/329           ..Phase shift keying  
       375/333           ...Biphase (manchester code)
- 2   375/344           (0 OR, 2 XR)  
       Class    375 :   PULSE OR DIGITAL COMMUNICATIONS  
       375/316           RECEIVERS  
       375/344           ..Automatic frequency control
- 2   375/346           (1 OR, 1 XR)  
       Class    375 :   PULSE OR DIGITAL COMMUNICATIONS  
       375/316           RECEIVERS  
       375/346           ..Interference or noise reduction
- 2   375/371           (0 OR, 2 XR)  
       Class    375 :   PULSE OR DIGITAL COMMUNICATIONS  
       375/354           SYNCHRONIZERS  
       375/371           ..Phase displacement, slip or jitter correction
- 2   375/373           (0 OR, 2 XR)  
       Class    375 :   PULSE OR DIGITAL COMMUNICATIONS  
       375/354           SYNCHRONIZERS  
       375/371           ..Phase displacement, slip or jitter correction  
       375/373           ..Phase locking
- 2   380/34            (0 OR, 2 XR)  
       Class    380 :   CRYPTOGRAPHY  
       380/255           COMMUNICATION SYSTEM USING CRYPTOGRAPHY  
       380/270           ..Wireless communication  
       380/33            ..Using plural paths or channels  
       380/34            ...Plural carrier frequencies
- 2   455/183.1        (0 OR, 2 XR)  
       Class    455 :   TELECOMMUNICATIONS  
       455/130           RECEIVER OR ANALOG MODULATED SIGNAL FREQUENCY  
                           CONVERTER  
       455/150.1        ..Signal selection based on frequency (e.g.,  
                           tuning)  
       455/179.1        ..Channel or station selection  
       455/183.1        ...With frequency synthesizer

09928799\_CLSTITLES

2 702/69 (1 OR, 1 XR)  
 Class 702 : DATA PROCESSING: MEASURING, CALIBRATING, OR  
 TESTING  
 702/1 MEASUREMENT SYSTEM IN A SPECIFIC ENVIRONMENT  
 702/57 .Electrical signal parameter measurement syste

m

702/66 ..Waveform analysis  
 702/69 ...Signal quality (e.g., timing jitter,  
 distortion, signal-to-noise ratio)

2 702/75 (1 OR, 1 XR)  
 Class 702 : DATA PROCESSING: MEASURING, CALIBRATING, OR  
 TESTING  
 702/1 MEASUREMENT SYSTEM IN A SPECIFIC ENVIRONMENT  
 702/57 .Electrical signal parameter measurement syste

m

702/66 ..Waveform analysis  
 702/75 ...Frequency

able 3  
above 36  
abstract 1  
access 2  
accompanying 1  
according 8  
achieving 1  
actually 2  
adapt 2  
advance 2  
aforesaid 4  
aim 1  
also 14  
always 2  
amplifier 1  
an 26  
and 73  
anode 1  
another 11  
any 1  
apparent 1  
applicable 1  
applied 7  
apply 3  
appropriate 1  
are 27  
as 23  
at 21  
atedart 1  
atransmission 1  
automatically 2  
avoid 2  
avoided 2  
ba 1  
band 5  
bands 3  
base 2  
based 1  
basic 1  
be 10  
become 1  
been 3  
before 3  
being 2  
between 3  
bfk 1  
block 3  
both 1

brief 1  
broad 3  
broaden 1  
by 29  
call 3  
called 2  
can 10  
cannot 1  
capable 2  
capacitance 8  
capacitors 7  
capture 2  
cascade 1  
cathode 1  
caused 2  
change 4  
changed 1  
changes 2  
changing 2  
channel 6  
circuit 1  
ckground 1  
closet 1  
combination 1  
command 1  
communication 39  
comparator 5  
compare 1  
completed 1  
complication 1  
components 1  
composed 2  
compress 3  
comprising 1  
condition 2  
conditions 6  
configuration 2  
configurations 1  
conjunction 1  
connected 10  
connecting 2  
consequently 1  
constant 1  
consumption 3  
contacts 2  
continuously 1  
control 22  
controlled 15

controlling 5  
controls 1  
conventional 2  
conversion 1  
cooperation 2  
correspond 2  
corresponding 2  
corresponds 2  
cost 2  
cother 1  
cycle 1  
decoder 2  
decrease 3  
decreased 5  
decreases 1  
degeneration 1  
delay 8  
demanded 3  
demands 1  
demodulated 1  
described 15  
description 3  
designated 1  
desired 2  
detailed 1  
detected 1  
diagram 4  
difference 2  
difficult 3  
diode 4  
directly 6  
disclosure 1  
discriminate 1  
discriminated 1  
discriminating 1  
divide 1  
divider 5  
division 1  
does 1  
downsizing 3  
drawing 1  
drawings 2  
due 4  
during 5  
each 1  
either 2  
element 5  
employ 1

end 6  
ends 3  
enough 1  
environment 2  
environmental 5  
equal 3  
equipment 39  
even 8  
example 2  
explanation 3  
exprqs 1  
extinct 1  
factor 2  
feasible 1  
field 1  
fig 8  
filed 1  
filter 5  
first 2  
fl 1  
flexibly 4  
fluctuate 1  
following 2  
for 12  
forcibly 1  
four 2  
frequency 34  
from 7  
furthermore 2  
general 1  
generated 6  
generates 2  
given 7  
gives 1  
good 1  
greatly 1  
grounded 4  
hand 1  
hardware 1  
has 7  
have 1  
here 3  
hereinafter 2  
high 9  
higher 4  
highly 1  
however 2  
identical 1



improve 2  
in 84  
incidentally 1  
includes 1  
including 5  
incorporates 1  
incorporating 1  
increases 1  
indicating 2  
indirect 1  
individually 3  
inductor 3  
information 8  
initial 2  
initialization 1  
initializes 1  
input 10  
instant 10  
instantaneous 1  
integration 3  
invent 2  
invention 20  
is 79  
it 14  
its 6  
known 1  
large 2  
larger 1  
later 1  
layer 4  
length 5  
lightening 2  
like 1  
limit 7  
limitations 4  
limited 1  
local 7  
localfrequency 1  
lock 51  
locked 13  
lockup 1  
logical 1  
long 1  
longer 1  
loop 18  
lower 1  
maintain 6  
maintained 2

maintaining 6  
maintains 1  
maintenance 1  
make 3  
maximum 1  
may 2  
meanwhile 1  
mentioned 2  
mid 1  
middle 1  
minimum 2  
mobile 2  
mode 3  
modulated 1  
monitoring 1  
more 1  
most 1  
mounted 3  
multiple 1  
multiplexed 2  
nature 1  
negative 1  
neither 1  
node 1  
nokj 1  
nor 1  
normal 1  
not 6  
note 1  
notification 8  
notifies 1  
numbers 1  
object 10  
objects 14  
occurs 1  
of 117  
off 1  
on 10  
one 7  
opponent 3  
or 16  
order 4  
oscillating 1  
oscillation 2  
oscillator 37  
other 5  
out 3  
output 7

over 3  
owing 1  
part 12  
partial 3  
parts 1  
performed 2  
performs 3  
period 21  
periods 1  
phase 40  
physical 3  
plurality 1  
point 2  
points 2  
portable 3  
position 2  
possibility 2  
possible 4  
possibly 2  
power 6  
precise 1  
predetermined 5  
preparation 3  
prescribed 4  
present 16  
prevented 2  
principle 4  
prior 7  
procedure 1  
process 3  
product 1  
provide 2  
provided 1  
quality 17  
radio 4  
rand 1  
range 9  
rate 13  
rates 1  
ratio 8  
re 1  
reaches 3  
reactance 3  
reactive 5  
read 1  
realize 3  
realized 14  
realizing 5

recei 1  
receive 4  
received 1  
receives 1  
receiving 11  
recent 1  
reception 5  
reduce 1  
reduction 5  
reference 2  
relates 3  
releases 1  
reliability 1  
reliably 4  
reliablythe 1  
repeatedly 1  
required 3  
resistor 1  
resonance 2  
resonator 2  
respectively 1  
responding 1  
response 7  
result 1  
retrial 1  
retrieved 6  
retries 3  
retrying 1  
rot 1  
rough 3  
satisfy 1  
schemes 1  
second 2  
self 3  
sequence 2  
seriously 1  
service 6  
set 10  
severely 1  
shift 1  
shifts 1  
shorter 1  
showing 4  
shown 3  
side 2  
signal 20  
signals 2  
simplify 3

simply 1  
since 2  
slot 1  
slots 2  
small 1  
smooth 1  
so 7  
some 4  
specified 4  
specifies 1  
stability 1  
stable 2  
stably 2  
start 3  
starting 1  
starts 1  
state 13  
station 2  
step 2  
still 1  
strongly 1  
structural 1  
structure 2  
structured 1  
subscribers 1  
substantially 1  
succeeding 4  
such 2  
sufficiently 1  
suitable 1  
sum 1  
summary 1  
supply 1  
supposed 3  
suppress 1  
suppressed 3  
surely 5  
switched 1  
switches 5  
synthesis 2  
synthesizer 5  
system 5  
systems 3  
tdma 1  
temperature 1  
terminal 6  
terminals 2  
than 7

that 5  
the 255  
there 6  
therefore 3  
therein 2  
thereof 5  
thereto 1  
these 2  
third 1  
this 3  
through 1  
time 9  
to 125  
tofaperiod 1  
tolerated 1  
transferred 1  
transmission 46  
transmit 3  
transmits 1  
transmitted 6  
transmitting 8  
tuning 6  
type 3  
unable 3  
unless 2  
until 1  
up 14  
used 1  
utility 1  
value 18  
values 10  
variable 13  
variance 1  
variances 9  
varies 5  
various 3  
vary 1  
vco 1  
via 6  
voltage 24  
way 1  
well 2  
when 12  
where 4  
wherein 7  
which 53  
whose 2  
wide 1

09928799\_WDS

will 1  
with 15  
within 2  
without 4  
years 1  
yet 7

09928799\_QUAL

5767746 99  
4253180 99  
5982208 99  
6112068 99  
4363131 82  
4400726 82  
5002387 82  
5282223 82  
5313496 82  
5726607 82  
5754437 82  
5757652 82  
5574986 81  
4286219 81  
4389622 81  
4599732 81  
4949051 81  
5222106 81  
5727027 81  
5764648 81  
6188900 81  
6192220 81  
4052558 81  
4168398 81  
4246654 81  
4255810 81  
4260983 81  
4282493 81  
4298986 81  
4361886 81  
4363002 81  
4377871 81  
4419760 81  
4503562 81  
4531102 81  
4543540 81  
4562410 81  
4596026 81  
4627099 81  
4630283 81  
4764730 81  
4802235 81  
4817197 81  
4847876 81  
4853841 81  
4864589 81  
4908627 81  
4918406 81



09928799\_QUAL

4955075 81  
5012494 81

09928799 WEST

(5767746 4253180 5982208 6112068 4363131 4400726 5002387 5282223 53134  
96 5726607 5754437 5757652 5574986 4286219 4389622 4599732 4949051 522  
2106 5727027 5764648 6188900 6192220 4052558 4168398 4246654 4255810 4  
260983 4282493 4298986 4361886 4363002 4377871 4419760 4503562 4531102  
4543540 4562410 4596026 4627099 4630283 4764730 4802235 4817197 48478  
76 4853841 4864589 4908627 4918406 4955075 5012494).pn.